

United States Environmental Protection Agency Office of Public Affairs Region 5 77 West Jackson Boulevard Chicago, Illinois 60604-3590 Illinois, Indiana Michigan, Minnesota Ohio, Wisconsin

# U.S. EPA Presents Cleanup Design for National Presto Industries Site

Eau Claire, Wisconsin

**June 1998** 

# This Fact Sheet Provides:

- information on the final design.
- an overview of the Record of Decision.
- a summary of the site background.
- an outline of the cleanup schedule.
- U.S. EPA and Wisconsin contacts.

# Information Repositories

Anyone interested in learning about the cleanup actions or U.S. EPA's Superfund process is encouraged to review the information repositories maintained for the NPI site:

Hallie Town Hall Route 9, 957 Hagen Road Chippewa Falls, WI

Chippewa Falls Public Library 105 West Central Street Chippewa Falls, WI

#### **INTRODUCTION**

The U.S. Environmental Protection Agency (U.S. EPA) has approved a final design for the Melby Road Disposal Site cap, excavation and placement of contaminated soil beneath the cap and a soil vapor extraction (SVE) system at the National Presto Industries (NPI) Superfund Site in Eau Claire, Wisconsin. The final design document is titled, "Melby Road Disposal Site Cap and SVE System Design." The document includes the environmental, construction, contingency, and financial aspects required to address the volatile organic compounds (VOCs) (chemicals that evaporate quickly) and inorganic compounds (such as metals) that have contaminated the site.

The U.S. EPA Record of Decision, signed on May 15, 1996, required implementation of the following measures to fully address all threats to human health and the environment posed by contamination at the site:

- Melby Road and East Disposal Sites—Installation of an SVE system at the
  Melby Road Disposal Site, removal of concentrated waste (if any) identified by
  the SVE system at the Melby Road Disposal Site, excavation and consolidation
  of East Disposal Site waste with Melby Road waste, and installation of a multilayer cap, compliant with Wisconsin hazardous waste regulations, over the
  combined waste at the Melby Road Disposal Site.
- *Drainage Ditch 3*—Removal of the contaminated soil and consolidation with waste at the Melby Road Disposal Site.
- *Dry Wells 2 and 5*—Removal of the dry well contents and contaminated soil, and disposal in an off-site landfill.
- *Plume 1-2*—Continued operation of the two-column air stripper at the leading edge of the ground-water contaminant plume, continued operation of an on-site pump and treat system to prevent the off-site movement of contaminated ground water, and long-term ground-water monitoring of Plume 1-2.
- *Plumes 3 and 4*—Continued operation of an on-site pump and treat system to prevent the off-site movement of contaminated ground water, long-term groundwater monitoring of Plumes 3 and 4, and surface-water sampling in Lake Hallie.
- Plume 5—Long-term ground-water monitoring of Plume 5 and surface-water sampling in Lake Hallie.

## CLEANUP ACTIONS TAKEN

A significant amount of cleanup work has already been done in connection with the NPI site and the nearby Eau Claire Municipal Well Field (ECMWF) Superfund site. The ECMWF site was combined with the NPI site after the discovery of a continuous ground-water plume (Plume 1-2) between the two sites. Four distinct plumes of contamination (underground areas of contaminated ground water) were eventually identified at the NPI site.

1986—Construction began on a twocolumn air stripping tower to remove VOCs from the ground water at the ECMWF as an interim measure.

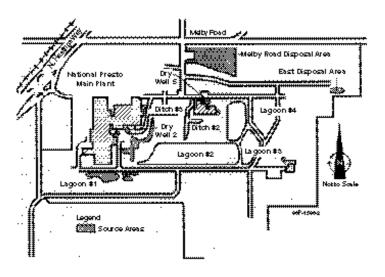
1987—Work on the NPI remedial investigation began. Water, soil and waste samples from the site were tested for contaminants. Several sources of contamination were identified as shown on the Site Diagram below.

1988—The final Record of Decision for the ECMWF site, which documented the cleanup measures to be done, was signed by U.S. EPA. The decision document provided for continued operation of the air stripper and the connection of several residences that had contaminated wells to Eau Claire's municipal water supply.

1989—U.S. EPA ordered NPI to provide bottled water to affected residents because the remedial investigation found that private wells in an area of Hallie had been contaminated with VOCs.

1990—A Record of Decision selecting a permanent alternative water supply was signed by U.S. EPA.

1991—U.S. EPA signed a second Record of Decision to treat on-site contaminated ground water and to prevent it from moving off site.



SITE DIAGRAM

1992—The Hallie Sanitary District was fully operational. Also, U.S. EPA ordered NPI to construct cascade aeration pump and treat systems to treat on-site contaminated ground water and to prevent it from moving off site.

1993—NPI began to remove the waste forge compound (waste product generated from the manufacture of artillery shells and projectiles) from Lagoon No. 1.

1994—On-site ground-water treatment systems began operation. In addition, removal of liquid waste forge compound from Lagoon No. 1 was completed and the removal of waste forge compound soil and sludge from the lagoon began. The contents of Lagoon No. 1 were transported off site for use as a supplemental fuel for a cement kiln.

1995—Lagoon No. 1 cleanup continues. Approximately 10,000 cubic yards of soil are temporarily stockpiled and managed on site. This soil was unable to be used as a supplemental fuel for a cement kiln.

1996—U.S. EPA signed a third Record of Decision to address the source areas: Melby Road and East Disposal Sites, Drainage Ditch 3, and Dry Wells 2 and 5.

Engineering Evaluation/Cost Analysis for the residual soil in Lagoon No. 1 and for the stockpiled soil previously removed from Lagoon No. 1 and temporarily managed on site. This decision document determined that the stockpiled soil would be placed beneath the multi-layer cap and that an SVE system would be installed in Lagoon No. 1 to treat the residual contamination. This SVE system has been installed and is currently operating in Lagoon No. 1.

1998—U.S. EPA approved the Melby Road Disposal Site Cap and SVE System Design implementing the final remedy components from the 1996 Record of Decision.

## OVERVIEW OF FINAL DESIGN

The final design document details every aspect of the preparation, installation/construction, and costs of the SVE system and multi-layer cap to address the VOC contamination at the Melby Road Disposal Site. U.S. EPA believes that the selected remedy will be protective of human health and the environment, be cost effective, and be a permanent solution.

#### Soil Vapor Extraction System

An SVE system will be installed and monitored at the Melby Road Disposal Site. The SVE system was designed to prevent future releases of VOCs from beneath the multi-layer cap into the ground water. A soil gas monitoring program will be implemented to monitor the effectiveness of the SVE system.

Approximately 1,300 and 3,000 cubic yards of soil mixed with waste forge compound will be excavated from the East Disposal Site and Drainage Ditch 3, respectively. These materials will be consolidated with waste at the Melby Road Disposal Site, thereby creating a single waste management unit at the NPI Site.

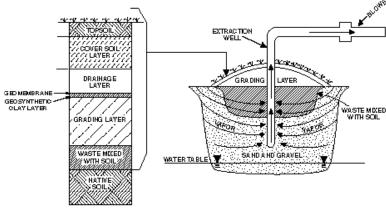
The SVE system will extract air and VOCs from under the capped area through a series of wells (see SVE Diagram on this page). The extracted air and VOCs are of a sufficiently low concentration that treatment will not be required; therefore, they will be released to the atmosphere. The blowers will be housed in a building and will continuously operate 24 hours a day. The SVE system will operate until U.S. EPA and the Wisconsin Department of Natural Resources (WDNR) approve it for closure.

#### Multi-Layer Cap Design

 A multi-layer cap compliant with Wisconsin hazardous waste regulations will be installed to cover the consolidated waste materials (see SVE Diagram on this page). The cap will eliminate the potential for direct human contact with waste material and will reduce rain from passing through the waste to the ground water.

The final design document described the multi-layer cap as consisting of:

A topsoil layer approximately 12 inches thick.



\*\* SOIL VAPOR EXTRACTION (SVE) SYSTEM

- A cover soil layer approximately 30 inches thick.
- A drainage layer approximately 18 inches thick.
- A two-component, low-permeability layer that consists of a geomembrane (a liner composed of synthetic materials) overlying a geosynthetic clay liner (a synthetic liner bonded to a low-permeability material such as bentonite). The geomembrane will be at least 40 mils thick.
- A grading layer for contouring.

A ground-water monitoring program would be implemented upgradient and downgradient of the capped area to monitor the effectiveness of the cap. Deed restrictions that require cap maintenance and prevent inappropriate land use would be placed on future development of the capped area.

#### Costs

The estimated capital cost (excluding construction engineering costs) is \$1.8 million. The estimated annual operation and maintenance cost is \$44,000. This includes all routine equipment maintenance, exhaust gas sampling and system monitoring, biannual reporting, quarterly sampling of 10 ground-water monitoring wells, and analytical and energy costs.

## OUTLINE OF CLEANUP SCHEDULE

It is estimated that it will take about three months to set up the equipment, complete the soil excavation, prepare the Melby Road Disposal Site, install the multi-layer cap, erect a building, build the SVE system, and start up the SVE system. The schedule below provides a general outline of the activities and beginning and ending dates.

#### Proposed Cap and SVE System Installation Schedule (1998)

Brief Description of Tasks	Beginning Date	<b>Ending Date</b>
Earth Work	June 1	August 21
Waste Removal	June 15	June 23
Grading Layer	June 23	July 2
Decontamination	July 2	July 7
Drainage Layer	June 30	July 22
Soil Cover Layer	July 16	August 5
Topsoil Layer	August 5	August 14
Erosion Control Installation	August 5	August 21
SVE System Installation	June 1	September 3
System Startup	August 26	<b>→ →</b>

#### **Additional Information**

Anyone interested in learning more about the final design for the Melby Road Disposal Site and SVE System, site background, other site-related cleanup activities, or the Superfund process is encouraged to review the documents in site information repositories listed on page 1 of this fact sheet. The repositories contain copies of the technical and community involvement documents related to the site. An Administrative Record file, which contains the information upon which the selection of the cleanup plans has been based, has also been established at the public library, town hall, and the U.S. EPA Region 5 office in Chicago.

For further information on the NPI site, please contact the federal and state staff members:

### U.S. Environmental Protection Agency (U.S. EPA)

#### **Michael Bellot**

Remedial Project Manager Office of Superfund (SR-6J) (312) 353-6425 bellot.michael@epa.gov

#### **Susan Pastor**

Community Involvement Coordinator Office of Public Affairs (P-19J) (312) 353-1325 pastor.susan @epa.gov U.S. EPA Region 5

77 West Jackson Boulevard Chicago, IL 60604-3590

Toll Free 1-800-621-8431 (9 a.m. - 4:30 p.m., weekdays)

Region 5 Home Page: www.epa.gov\region5

### Wisconsin Department of Natural Resources (WDNR)

#### George Mickelson

Project Manager WDNR Box 7921 Madison, WI 53707 (608) 267-0858 mickeg@dnr.state.wi.us

#### **Steve Thon**

Environmental Engineer WDNR 1300 West Clairemont Avenue Eau Claire, WI 54702 (715) 839-3776 thons@dnr.state.wi.us

### Wisconsin Department of Health and Family Services (WDHFS)

#### Chuck Warzecha

Hydrogeologist WDHFS 1414 East Washington Avenue Madison, WI 53704 (608) 267-3732 warzecj@dhfs.state.wi.us



U.S. EPA Environmental Protection Agency Office of Public Affairs (P-19J) Region 5 77 West Jackson Boulevard Chicago, IL 60604-3590